Newsletter

July 1980, # 21

Blissymbolics Communication Institute

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BLISSYMBOLICS COMMUNICATION INSTITUTE

NEWSLETTER

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BCI Newsletter
Mrs. Barbara Rush
64 Magnolia Drive, Hamilton
Ontario, Canada, L9C 5T2

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BCI Publications and Products

FROM THE EDITOR

We are grateful to Nat Peters and Meryl Schwartz for permission to print their paper on the use of Blissymbolics with the hearing-impaired population. It is our hope that others working in this field will respond to this article.

We would possibly all agree that the purpose of Blissymbolics is communication. However, we may disagree on the meaning of communication itself. Shirley McNaughton describes her interpretation of this process using Bliss symbols.

The next four articles were solicited by Pam Elder of the Blissymbolics Resource Centre at the University of Alabama in Birmingham. Betty Rabil and Linda Hill discuss their pre-school programme at the Cerebral Palsy Centre of Atlanta. An experiment in awareness and empathy is provided for us by Jan Williams. Instructors working with IEPs will be pleased to read Denise Gibb's advice on fitting Blissymbolics training into the traditional IEP paradigm. Elizabeth Chalmers describes the Blissymbolics programme in operation at a residence for the mentally retarded. Thank you, Southern Ladies, for providing this regional flavour.

The use of Blissymbolics with verbal children presenting expressive language delay is expanding quite rapidly. Judy Rapkin has submitted a most interesting case study.

Since Christmas is such an ideal time to announce a birth, Shirley McNaughton was delighted to receive a card from colleagues in Holland informing her of their new Bliss Group.

Computers are very much "in" these days. Susan Ravlin informs us that a computer-based talking/printing communication system is being used by students in the Michigan school system.

Another electronic device in wide use is the Handi Voice. Loretta Biasutti has adapted this system for a Blissymbol user and shares her experience with us.

Anne Warrick, author of the preschool booklet distributed by BCI, has responded to the article written by Clare Latham (March 1980). Anne is applying Piaget's theories to her application of Blissymbolics for language and cognition training.

Penny Parnes has sent us an amusing story outlining her four-year old daughter's use of Blissymbols.

We conclude with our Symbol Users' Corner with thanks to Todd Schinnerer, a primary symbol class in Hamilton, a senior symbol class in Ottawa, Paul Marshall, and Alistair Hunter.

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Another lucky symbol user who will attend the Rehab. International Conference in Winnipeg is Sue O'Dell of Toronto. Sue will travel with companion, Beth Watkins. Funding is being provided by the Scarborough Choral Society, the Knights of Columbus, and the Constance Baugh Chapter of I.O.D.E. It is through the generosity of such organizations that adult symbol users will be able to make a contribution to the Conference.

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This is the design chosen by the United Nations as the official emblem for International Year of Disabled Persons - 1981. The emblem represents two people holding hands in solidarity and support of each other in a position of equality. If you have any plans to involve the use of Blissymbolics in your celebration of this International Year, please do share your ideas with us.

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The next issue will appear in November 1980.

Have a good Summer !

Barbara Rush
Editor

BLISSYMBOLS: A POSSIBLE ADJUNCT FOR THE DEVELOPMENT OF COMMUNICATION AND COGNITION IN THE HEARING IMPAIRED

By: Nathanial A. Peters, Ph.D.
Meryl Schwartz, M.A.
Pontiac, Michigan

(Dr. Peters is Director of the Reading and Language Clinic, Oakland Schools, Pontiac, Michigan. Meryl Schwartz is a Speech and Language Consultant to the Pontiac Public Schools system.)

Problems involving the communication and cognitive abilities of the hearing impaired have historically presented society with overwhelming challenges. Internecine conflicts between practitioners and theoreticians advocating oralism, manualism, cued speech, and total communication have sometimes confused the hearing impaired, their parents, and the general public. Not infrequently, the hearing impaired person with difficulty learning either manual or oral forms of communication is especially affected. Visual symbols in the form of traditional orthography were widely used as an aid to communication. In the last decade a logographic writing system, Blissymbolics, has been found to have utility as a communication system, and as an adjunct in developing concepts for children who are non-speaking because of motor impairment due to neurological damage, language impairment, or mental impairment.

Blissymbols were viewed by their creator, Charles Bliss, as an international language that could help alleviate human conflict based on language and cultural differences. However noble in intent, the Bliss philosophy never caught on and his tome Semantography (1965) languished on library bookshelves. In the early 1970's his work was discovered by Shirley McNaughton, an educator of children with multiple handicaps. McNaughton took Bliss' symbols and began using them with non-speaking children at the Ontario Crippled Children's Centre. Teaching methodologies and materials for teaching non-speaking children were developed by McNaughton and her colleagues (McNaughton, 1974). In the last five years Blissymbols as a form of communication and as an aid to concept formation has grown in influence and acceptance among educators and therapists.

Blissymbols is a form of meaning-based communication. Like other forms of logographic writing, the Rebus symbols and the Carrier-Peak symbols, Blissymbols seem to be more easily learned than words written in traditional orthography (Foulds, McNaughton). Additionally, because of the pictographic nature of certain symbols, Blissymbols could be termed more meaningful than symbols written in traditional orthography. Although Blissymbols were originally used in placements for non-speaking, multi-handicapped children and adults, it is thought that they can be used as an adjunct for increasing communication effectiveness in the hearing impaired.

Blissymbolics is a communication system that can be adapted to the hearing impaired population. Blissymbols can be an addition to any communication system that an individual is presently using. That is, it can support oral or manual communication modes as well as total

communication. It is especially useful with the hearing impaired child who displays other handicaps such as language learning disabilities, cerebral palsy, visual impairment or mental retardation. These children may be having a very difficult time developing expressive language through techniques normally used with the hearing impaired. Blissymbols can also be used as a stimulus to use oral language with the child who has unintelligible speech or with the child with limited expressive language. The symbols may be developed for: expressive communication, language and cognitive development, syntax development, logical thinking, receptive language and/or reading development.

Blissymbolics is not meant to be a communication system by itself for the hearing impaired population. Instead it can be utilized with other techniques. The symbol system will enable the hearing impaired to escape from much of the isolation that they may encounter because of poor speech or communication approaches that have limitations for non-deaf listeners (i.e. sign language or finger spelling). Since a Blissymbol communication board will have the written word for the symbol with the symbol, any person who can read English can understand the symbol used.

It is of utmost importance when developing the use of Blissymbolics with the hearing impaired that the child clearly understand the language represented by the symbol. For instance, it does little good to present the symbol "uncle" if the child does not understand what "uncle" means. Much background work may be needed before the concept is comprehended. When teaching the concept the lesson may be done orally or though total communication techniques. The symbol can be enlarged and put on the bottom of the child's board with pictures of the concept. The symbol for "uncle," for example, would be accompanied by pictures of the child's uncles with a simple family tree for further clarification. When the concept and the symbol are understood, the symbol can be returned to its proper place on the board and the pictures removed. When teaching the concept, the symbols are often pictographic and make the concept clearer. For instance, the symbol for uncle is

The symbols are read: "brother to a parent," the exact definition of an uncle.

Often the hearing impaired population is taught the use of syntactical structures by sentence patterning. For example, one pattern may be for the use of direct objects. It is most helpful if these sentence patterns appear on the child's board and the parts of the sentence are colour coded. The symbols on the board would match the part of speech that appears in the patterns. For instance, all adjectives would be red, the nouns brown, the verbs green. This way the child who may not understand the concept of "verb," but who comprehends the meaning of a particular verb can match colours to form sentences. These children may be able to distinguish a verb from a noun, but be unable to understand the label for them. A child who has much difficulty in comprehending abstract concepts such as verbs, may develop the understanding by seeing

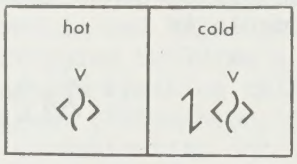
that all these symbols are the same colour and therefore have something in common.

When using Blissymbols for expressive communication, the hearing impaired child will also use other means of communication simultaneously. A child should always be encouraged to speak as (s)he is pointing. Often a child may use sign language as he uses the Blissymbols, although signs requiring both hands will be emprecise.

Because of lack of space on the Blissymbol board, a normal hearing child may use the symbol "opposite meaning" to convey an idea. For instance, a child may need to point to the symbol "opposite meaning" and the symbol "fast" in order to convey "slow." The normal hearing child is constantly exposed to opposite terms such as hot-cold, bad-good, and happy-sad. The hearing impaired child lacks this constant exposure so necessary to comprehending the concept of "opposite." Furthermore, to expect young hearing impaired children to combine "opposite meaning" and "fast" to convey "slow" is unrealistic.

Speech as well as written language is expected of the hearing impaired child. When using the Blissymbol board the child who may be merely patterning the technique of pointing to the "opposite meaning" symbol to form a new word, may say or write the words "opposite meaning" instead of the intended word. For example, the child will say or write, "opposite meaning fast" to express the idea of "slow."

For the hearing impaired child with good, although not necessarily perfect fine motor control, the two symbols used in expressing an opposite idea may be combined in one square on the Blissymbol board. This will give the child the constant exposure that is needed to understand "opposite." Activities may then be used to assist the symbol user in understanding the concepts, the symbols, and why they are grouped together. For example, the square for hot and cold would appear as:



The child can then point to the desired word. Once again it is important to remember that the concept must be understood and the symbol mastered before it can be used in combined forms. The instructor may want to enlarge the symbol while teaching because the symbols are small and similar. When the concept and symbol are understood, it can then be placed in its proper size and position on the board.

BLISSYMBOLS USED IN COMBINATION WITH SIGN LANGUAGE

The symbols presented to the hearing impaired child may be changed to correspond with the compound parts of sign language. For instance, in sign language, the word "brother" is signed as "boy," "same" ("family" being understood). The Blissymbols may then be concatenated to correspond to the sign.

The changing of Blissymbols to correspond to sign language would depend on the child's individual capabilities. Blissymbolics can also be used to clarify a sign. In sign language the word "uncle" is signed as a "u" to the side of the forehead representing maleness. In Blissymbols the word "uncle" is represented as

 "brother to a parent"

Thus, the Blissymbol represents and clarifies the concept of uncle more meaningfully than the sign in isolation. By explaining both the sign language meaning and the Blissymbolic meaning, a concept may become more understandable to the hearing impaired person.

THE USE OF BLISSYMBOLICS IN CONCEPT DEVELOPMENT

Blissymbolics may be used to facilitate concept development with the hearing impaired. Many of the symbols do not rely solely on teacher-explained information for comprehension. Rather, due to the logographic nature of Blissymbols, they share some of the graphical qualities of pictures and are, therefore, easier to understand. The meaning behind the symbol is to some extent explained by the symbol itself. For example, the symbol "between" is shown as

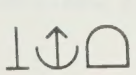
Through activities using verbal and/or non-verbal clues, a child will come to understand the concept of between. Some children may not need the activities and will comprehend the concept by simply understanding the component parts (an object placed among two other objects).

"(To) give" is represented as 

Through activities beginning at the most concrete stage, a teacher gives the child an object similar to the pictographic "container"

 represented in "(to) give."

Later various other objects may be used. Many of the Blissymbols are compound symbols. For example, the concept of teacher is sown as



A child who has an understanding of the component parts can then understand the symbol and the concept "person who gives knowledge."

BILLY: A CASE STUDY

Billy, age seven years-seven months at the time of the introduction of Blissymbols, showed many difficulties in receptive and expressive language that were not related to his hearing loss. Billy's response to audiological evaluation varied at times. However, he demonstrated a moderate to severe sensorineural hearing loss bilaterally. This child also has cerebral palsy involving his left arm and hand, learning disabilities involving reversals, inversions, perseveration, visual and auditory memory, andsensory integration difficulties. When entering the multihandicapped class, Billy had very little expressive language. He used jargon and isolated nouns. In addition, Billy knew a few signs. On the Assessment of Children's Language Comprehension Test (Foster, Giddard and Stark, 1973), administered in May 1977, Billy obtained a score of 36/50 on vocabulary and 30% of two critical elements when the test was administered orally. With total communication, Billy's score was 45/50 on vocabulary, 60% on two critical elements and 40% on three critical elements.

Blissymbolics was introduced as a supplement to the language development lessons in the classroom and vocabulary was added as needed. All methods to introduce a concept were applied, including using the actual object, pictures, the written words, the sign and the Blissymbol. The vocabulary and the symbol were then incorporated into phrases, sentences, and stories with much repetition. A record of the symbols introduced, applied, and initiated by Billy were also helpful. A news book with a sentence or two of activities at home and at school was sent back and forth from school to home. The news included the new vocabulary introduced at school and Billy was then to read or tell the news with the use of a Bliss board. New symbols were added to the board as needed but oral language was always used in conjunction with the symbol.

After a year on the Blissymbolics program, Billy is often able to initiate communication using symbols in three and four word sentences. Billy still tends to use jargon, but when asked, can often explain the general meaning he wishes to communicate by using the Bliss board. Billy's speech seems to improve when he uses the board.

Although the results are not dramatic, the authors believe they reflect the success of Blissymbols in providing Billy a tool for communication and cognitive development. Especially significant was the increased desire to communicate and the increased effectiveness of his communication.

The increase of Billy's communication effectiveness was also demonstrated empirically. First, on a re-administration of the Assessment of Children's Language Comprehension in May 1979, Billy obtained a score of 50/50 on vocabulary, 90% or two critical elements, 70% of three critical elements, and 60% of four critical elements when the test was administered orally. Re-administration of the test using total communication did not increase his performance on the Assessment of Children's Language Comprehension. To see if those interacting with Billy on a daily basis observed an increase in his communication effectiveness, the authors developed a questionnaire that was given to his mother, teachers, teacher aides, speech and language therapist, physical therapist, and occupational therapist. A reliability-

consistency measure that is part of the Statistical Package for the Social Sciences (University of Chicago) showed that the questionnaire had a reliability of .68.

The questionnaire was given to eight professionals and to Billy's mother. The results are as follows:

	Yes	%ile	No	%ile	No Difference	%ile
1) appears to use less jargon when communicating	7	77.8	0		2	22.2
2) appears to use more appropriate syntax when communicating	2	22.2	1	11.1	6	66.7
3) appears to use more appropriate language when communicating	5	55.6	0		4	44.4
4) appears to transfer concepts learned through the Blissymbols to natural communication	5	55.6	1	11.1	3	33.3
5) appears to use more intelligible speech when communicating	5	55.6	1	11.1	3	33.3
6) appears to cope more adequately with frustration	5	55.6	1	11.1	3	33.3
7) appears to relate more productively with peers	2	22.2	4	44.4	3	33.3
8) appears to communicate his needs more effectively	7	77.8	1	11.1	1	11.1
9) appears to have more desire to communicate	6	66.7	0		3	33.3

10) When Bill is frustrated, which communication system does he use ?

oral	1	11.1
sign language	0	
total communication (oral and sign)	6	66.6
Blissymbols	1	11.1
Blissymbols and total communication	1	11.1

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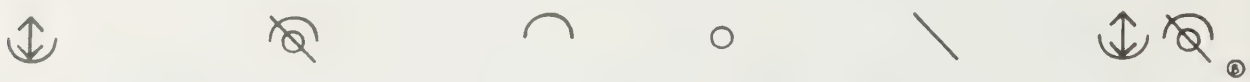
COMMUNICATION

By: Shirley McNaughton
BCI, Toronto

QUESTION: What is communication?

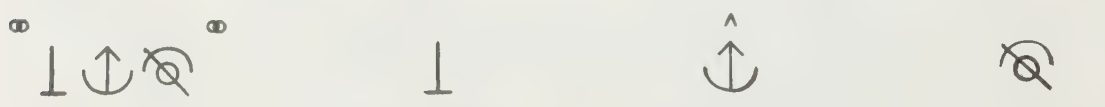
ANSWER: The transmission of meaning!

exchange + meaning (i.e. mind + mouth + pen, pencil) = communication

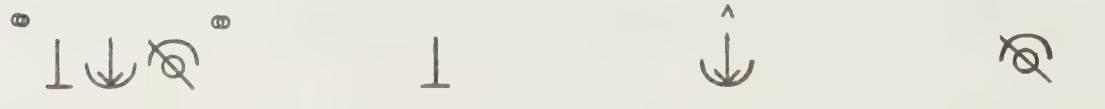


Effective communication requires the following:

transmitter (person + (to) give + meaning)



receiver (person + (to) receive + meaning)



PRESCHOOL PROGRAMMING WITH BLISSYMBOLICS

By: Betty E. Rabil
Linda J. Hill

In June of 1979 the Cerebral Palsy Center of Atlanta initiated a project utilizing Blissymbols with 14 speaking and non-speaking children in the kindergarten class. The initial goals were to determine whether Blissymbolic instruction would facilitate reading readiness skills and to encourage acceptance of the two non-speaking children and their communication system within the classroom. An additional goal was to improve language concepts such as body parts, object identification and discrimination, and function of objects. The children in the class were multi-handicapped and ranged in age from 3 to 6 years. Their mental age functioning was 2 to 7 years with a mean mental age of approximately 4 years.

The program was initially implemented by the classroom teacher and the speech-language pathologist with programming sessions held within the classroom for one half-hour per week. Various activities were used to encourage interest and group participation in the training sessions. The most successful of these included storytelling with Blissymbols, playing games such as "Simon says", requesting desired objects, role playing as "teacher" and constructing art projects with Bliss.

In April of 1980 the classroom project was re-assessed to determine progress and the need for modification. It was found that, following Blissymbol instruction, 8 of the 14 children acquired a sight reading vocabulary of at least 10 to 15 words. All of the children had a Blissymbol vocabulary of approximately 25 object symbols and could state the function of approximately half of these. By the end of the unit on body parts they could identify 8 to 10 body part symbols; however, many of the children confused the symbols "nose" and "hand".

In the beginning of the project it was noted that the children had a poor understanding of the word "sentence". They generally answered questions with one word and became quite confused when asked to reply in a complete sentence. After Blissymbol instruction the children responded to questions in complete sentences on request and some of them could arrange mixed Blissymbols into correct syntactical patterns.

The most positive aspects of this project were its effect on the attitudes of the speaking and non-speaking children toward the Bliss communication system and the attitudes of the non-speaking children toward themselves. Classroom instruction appeared to increase the self confidence of the non-speaking children. They felt successful because they had previous experience and a wider vocabulary in Blissymbols than the speaking children. The speaking children were highly interested in the symbol system and the Bliss sessions became a favorite classroom activity.

Following the evaluation of the project and changes in classroom personnel, the program was modified to accomodate the 12 speaking children whose speech and language needs were not being met through an exclusive Bliss program. Changes were also made in the sessions to allow the speech-language pathologist to model language training techniques for the classroom teacher. Currently, the training sessions have been expanded to include speech improvement and language development as well as Blissymbolic instruction.

SHARING THE EXPERIENCE: "WHAT IS IT LIKE TO BE SPEECHLESS?"

By: Jan Williams, M.Ed., CCC-Sp

(Jan Williams is Head Teacher at the Addison Center for Multi-Handicapped in Bessemer, Alabama.)

What is it like to be speechless? That is a question which few lay people ever contemplate unless they perhaps have some family member or close acquaintance who is unable to communicate intelligibly through speech. It is a question that probably even fewer children contemplate, but, recently elementary school children in Jefferson County, Alabama, were given the opportunity to consider first hand what it is like to be nonvocal. This was an experience they were afforded as part of Handicap Awareness Day.

One of the day's objectives was for students to attempt to function as normally as possible while temporarily handicapped. Therefore, those students who were designated to have a severe communication disorder were required to find a means of communication other than speech. The students were allowed to write, use gestures, manual sign (a few signs were introduced as part of the program), and to use various portable communication aids. Many of the communication aids displayed Blissymbols. Once several modes of communication were performed by the students, they then participated in a general discussion of the communication techniques used.

Naturally all of the students were curious about the Blissymbols. Initially they were very surprised to learn that the handicapped student whom, on occasion, was referred to as "dumb", "stupid", "retarded", could do things with the symbols that they could not do, such as identify the symbol without aid of the written word, and form sentences with the symbols.

During the brief discussion periods,the children frequently posed questions which parallelled those raised by adults, such as "Why don't you just use printed words?" The students gave very interesting and frequently accurate interpretations regarding the meaning behind the symbols. They were quick to pick out common elements found in the different symbol categories. They displayed creativity in combining symbols to get the meaning across when a specific symbol was not available.

Although the use of manual sign was of interest to the students, most of the children chose the use of communication aids displaying symbols as their primary mode of communication. This was probably due in part to the electronic nature of many of the devices. With this in mind and discounting those students who showed a flair for theatrics when using gestures, many of the children easily accepted and adapted their communications to the use of symbols. Some children expressed the idea that they were more comfortable with the Blissymbols, versus the manual sign, because the word always appeared with symbol, therefore almost anyone could understand their message.

With continued interest and support of parents and school personnel, we hope to expand the program in the coming year. Hopefully, as the program grows, more people will become familiar with the alternative modes of communication, such as Blissymbols, which are available to the speechless population.

IEPs FOR BLISSYMBOL TRAINING

By: Denise P. Gibbs, M.S.

(Denise Gibbs is Supervisor Speech Pathology at the University of Montevallo, Montevallo, Alabama).

At the Speech and Hearing Center at the University of Montevallo, a Blissymbol training program was initiated with two children in February of this year. Training goals were established and put in the form of an Individual Educational Program (IEP).

In establishing the program, goals relating to symbol-vocabulary acquisition, symbol-grammar (syntax) development, and functional use of symbols were established. Vocabulary goals were based on the client's functional communication needs. The rate at which the client could learn the symbols was also a determining factor in establishing vocabulary goals. One of the clients learned 119 symbols during the three month training program while the other client learned only 44 symbols. The basic vocabulary goal was stated on the IEP as: The client will point to the appropriate Blissymbol with 95% accuracy when given a verbal cue by the clinician. Objectives included matching symbols in game-oriented activities; choosing the correct symbol when given only two symbols; choosing the correct symbol when given three to ten symbols; pointing to the correct symbol on the communication board with only 1/4 of the symbols in view; pointing to the correct symbol on the communication board with 1/2, 3/4, and then all of the symbols in view; and pointing to the symbol which appropriately completed a 2-4 word phrase. Additional vocabulary objectives stressed semantics and included categorization activities, opposite relation activities, and use of symbols to describe actions and objects. The basic syntactic goal was stated on the IEP as: The client will combine symbols with 90% accuracy to express two element relations, three element relations, and four element relations. Objectives were for the client to combine symbols to demonstrate agent-action, action-object, noun-attribute, agent-action-object, noun-attribute-action, agent-attribute-action-object, and agent-action-attribute-object relationships. The basic functional-use goal was for the client to use Blissymbols in a variety of communication situations with 90% accuracy. Objectives included appropriate use of the symbols to ask questions, respond to questions, make descriptive statements, make comparative statements, and use the symbols in a variety of environmental situations. Situations to be structured into the therapy program include a visit to the grocery store, a visit to a clothing store, ordering snacks at a snack shop, ordering a meal in a restaurant, asking a stranger for directions, talking with immediate and distant family members, and making a "presentation" in class working with a speaking client.

It has been a challenge to structure the Blissymbol training program into a traditional IEP paradigm but by establishing the program in this format, we have gained much. Other teachers involved in the implementation of this program seem to understand it more thoroughly because it does fit the traditional model and parents can clearly see the direction in which the program will develop. We hope to expand on this basic model and design a much more comprehensive Blissymbol and language training program which can have a wide range of applicability for clients with various degrees of impairment.

"TEACH THIS RESIDENT TO TALK"

By: Elizabeth Chalmers, M.S.

(Elizabeth Chalmers is a Speech and Language Pathologist at the Partlow State School, Tuscaloosa, Alabama.)

"Teach this resident to talk!" "This resident looks so intelligent--why can't he communicate with us?" "After a year of articulation training, we see no progress. What is wrong?"

These are common comments received by speech pathologists not only in an institutional setting such as Partlow State School, but in any setting where clients who have a poor prognosis for speech correction are seen. This problem is frustrating not only for the therapist, but also for other professionals involved in the case, the family, and most importantly the client himself.

One of the most common deficits exhibited by those who are mentally retarded is their lack of communicative abilities. Traditional methods of training have proven to be futile for many residents seen for speech correction. So you can imagine our excitement when we were introduced to an alternate mode of communication--Blissymbolics.

Problems seem to be inherent when initiating any new program. Our story at Partlow seems to be a classic example of every situation that can be encountered when beginning a program such as this.

The first task at hand was identifying an appropriate population. This in itself was not an easy matter, in that Partlow offers a very diverse group to select from.

The DESEMO Project of the University of Alabama in Birmingham worked in conjunction with Partlow professionals to evaluate residents who had been referred for augmentative speech training. The final outcome of these diagnostic procedures identified residents with profound to mild mental retardation. Physical abilities varied from total care residents confined to a wheelchair to ambulatory persons who had the potential of functioning in a community setting.

After close observation of these residents, several common behavioral factors were noticed--the most prevalent being the desire to communicate. Although their communication attempts varied widely from gestures and severe articulation deficits to a longing look to be understood, the need to reach out to a listener was obvious.

Another common factor observed was the total feeling of frustration when their individual means of communication could not be understood by the listener. This frustration took the form of anger and maladaptive behavior to passive withdrawal from the environment.

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In establishing the program, goals relating to symbol-vocabulary acquisition, symbol-grammar (syntax) development, and functional use of symbols were established. Vocabulary goals were based on the client's functional communication needs. The rate at which the client could learn the symbols was also a determining factor in establishing vocabulary goals. One of the clients learned 119 symbols during the three month training program while the other client learned only 44 symbols. The basic vocabulary goal was stated on the IEP as: The client will point to the appropriate Blissymbol with 95% accuracy when given a verbal cue by the clinician. Objectives included matching symbols in game-oriented activities; choosing the correct symbol when given only two symbols; choosing the correct symbol when given three to ten symbols; pointing to the correct symbol on the communication board with only 1/4 of the symbols in view; pointing to the correct symbol on the communication board with 1/2, 3/4, and then all of the symbols in view; and pointing to the symbol which appropriately completed a 2-4 word phrase. Additional vocabulary objectives stressed semantics and included categorization activities, opposite relation activities, and use of symbols to describe actions and objects. The basic syntactic goal was stated on the IEP as: The client will combine symbols with 90% accuracy to express two element relations, three element relations, and four element relations. Objectives were for the client to combine symbols to demonstrate agent-action, action-object, noun-attribute, agent-action-object, noun-attribute-action, agent-attribute-action-object, and agent-action-attribute-object relationships. The basic functional-use goal was for the client to use Blissymbols in a variety of communication situations with 90% accuracy. Objectives included appropriate use of the symbols to ask questions, respond to questions, make descriptive statements, make comparative statements, and use the symbols in a variety of environmental situations. Situations to be structured into the therapy program include a visit to the grocery store, a visit to a clothing store, ordering snacks at a snack shop, ordering a meal in a restaurant, asking a stranger for directions, talking with immediate and distant family members, and making a "presentation" in class working with a speaking client.

It has been a challenge to structure the Blissymbol training program into a traditional IEP paradigm but by establishing the program in this format, we have gained much. Other teachers involved in the implementation of this program seem to understand it more thoroughly because it does fit the traditional model and parents can clearly see the direction in which the program will develop. We hope to expand on this basic model and design a much more comprehensive Blissymbol and language training program which can have a wide range of applicability for clients with various degrees of impairment.

"TEACH THIS RESIDENT TO TALK"

By: Elizabeth Chalmers, M.S.

(Elizabeth Chalmers is a Speech and Language Pathologist at the Partlow State School, Tuscaloosa, Alabama.)

"Teach this resident to talk!" "This resident looks so intelligent--why can't he communicate with us?" "After a year of articulation training, we see no progress. What is wrong?"

These are common comments received by speech pathologists not only in an institutional setting such as Partlow State School, but in any setting where clients who have a poor prognosis for speech correction are seen. This problem is frustrating not only for the therapist, but also for other professionals involved in the case, the family, and most importantly the client himself.

One of the most common deficits exhibited by those who are mentally retarded is their lack of communicative abilities. Traditional methods of training have proven to be futile for many residents seen for speech correction. So you can imagine our excitement when we were introduced to an alternate mode of communication--Blissymbolics.

Problems seem to be inherent when initiating any new program. Our story at Partlow seems to be a classic example of every situation that can be encountered when beginning a program such as this.

The first task at hand was identifying an appropriate population. This in itself was not an easy matter, in that Partlow offers a very diverse group to select from.

The DESEMO Project of the University of Alabama in Birmingham worked in conjunction with Partlow professionals to evaluate residents who had been referred for augmentative speech training. The final outcome of these diagnostic procedures identified residents with profound to mild mental retardation. Physical abilities varied from total care residents confined to a wheelchair to ambulatory persons who had the potential of functioning in a community setting.

After close observation of these residents, several common behavioral factors were noticed--the most prevalent being the desire to communicate. Although their communication attempts varied widely from gestures and severe articulation deficits to a longing look to be understood, the need to reach out to a listener was obvious.

Another common factor observed was the total feeling of frustration when their individual means of communication could not be understood by the listener. This frustration took the form of anger and maladaptive behavior to passive withdrawal from the environment.

USE OF BLISS WITH CHILD WITH EXPRESSIVE LANGUAGE DELAY

By: Judy Rapkin, M.Sc., (App) C.C.C.

(Judy Rapkin is a Speech Pathologist at the Simcoe Hall Crippled Children's Centre in Oshawa, Ontario.)

BACKGROUND INFORMATION:

Charlie is an eight year old child. For the past five years he has been enrolled in a special centre for children with both physical handicaps and speech and language deficits. He is not physically handicapped. Initial diagnosis at the age of three was moderate receptive and severe expressive delay with possible oral and verbal apraxia. Only the earlier developing phonemes were evident in production. Output was unintelligible and most communication was made using non verbal methods - i.e. gestures, grunts. Psychological testing indicated functioning within normal limits.

Intensive traditional therapy was conducted over a four year period. Goals were to improve receptive and expressive language and increase intelligibility of speech production.

PRE-BLISS TRAINING:

In September, 1979 a re-evaluation of the child's speech and language was made. Language skills were found to be similar to those characterized by the Boston classification of Broca's aphasia. Receptive language was only about 1 year delayed. However, expressive output was severely impaired. Spontaneous language was minimal and in most environments was limited to single or two word combinations with reliance on non-verbal methods. Output was slow, laboured, word order frequently incorrect and difficulty was noted when even one critical element in a sentence had to be changed (ex. "I put pen" to "You put pen" often resulted in the sentence "I you put"). Limited difficulty was noted on confrontation naming tasks.

Comment by the mother was that although more two and occasionally three word combinations were utilized at home than at school, much guesswork was required to determine the child's intent. On assessment of speech, misarticulation of velar plosives as well as the later developing phonemes (affricates, sibilants, lingual-fricatives) was evident. Intelligibility of output was frequently affected.

INITIATION OF BLISSYMBOLS:

It was decided that Blissymbols should be introduced. There were many reasons for this decision; Charlie could not functionally use oral language, he was frustrated by his limited output, and traditional therapy methods had been utilized for over 5 years with limited success. At the time of introduction, it was uncertain whether this system would serve as an alternate form of communication or simply as an augmentation to oral expression. Research had shown that with the introduction of symbols, children's verbal output increased due to a reduction of frustration and of pressure for oral communication. As well, Charlie had been noted to benefit from visual cuing (i.e. using fingers to indicate the number of words in the sentence) when attempting to verbalize, and the symbols were felt to be an optimal cuing device.

BLISS TRAINING:

Bliss training began in October, 1979. After initial introduction Charlie experienced no difficulty learning the symbols, be they pictographic, representational, simple or compound. The symbol strategies of possession, opposite and combination were all presented and acquired with relative ease. Symbols representing all the parts of speech were introduced.

Training involved developing both receptive and expressive skills. Reception was determined by having the child either point out individual or combination of symbols on command, or by having him verbalize while therapist pointed out a series of symbols. Expression was demonstrated by having Charlie use the board to express an idea, answer a question or describe a picture. Throughout the sessions oral expression was emphasized and the child had to verbalize each symbol as it was pointed. Training in the use of some syntactic rules was involved. All articles and prepositions were expected, both when Charlie pointed out a sentence and when he interpreted the therapist's sentences. If the child omitted a symbol or if word order was incorrect, the model was provided to be imitated. As the goal was to improve oral expression, as well as increase facility with the board, the child first verbalized while relying on the visual symbol cues, and then tried to verbalize without. Structures trained were designed to increase in both length and complexity as skills improved.

RESULTS OF TRAINING:

An evaluation of the benefits of Bliss training was made in March 1980, 5 months past initiation. The child had been seen for an average of 3 sessions per week with a carryover program at home. He had learned 150 symbols in this period.

It was evident early on, that the symbols system would not become the child's sole means of communication. Charlie was reluctant to use the board outside the therapy setting, a situation frequently noted with mobile individuals. However, the board's use as a functional therapy tool was equally clear. Charlie's need for visual cuing had been noted prior to initiation of the Bliss system, and the board's use as a more sophisticated visual cuing device was soon evident. After the first month Charlie was able to verbalize up to with word sequences while the therapist pointed out the associated symbols on the board. Expressive output without a model was slower to develop. However, after five months of training, significant improvement in skills was evident. The child was consistantly able to point out and verbalize sentences of up to five words, (ex. "I go work in school"). Word order was correct in 80% of the utterances and on the occasions when it was not, Charlie was generally able to self-correct.

As the long term goal was to increase length of spontaneous output without the need for visual cues, the child was required to produce sentences, initially using the board, and then after a time delay of increasing length, without.

Charlie was easily able to verbalize utterances of up to five words, after a five minute delay. A more significant result of the training procedures however has been Charlie's recent attempts to verbalize utterances of similar length and complexity without any reliance on the visual cues. While incorrrect word order and omission of function words are frequently evident, correctly produced utterances of up to five words are being noted. (ex. "She buy food in store").

Charlie's mother offered more enlightenment regarding the benefit of Bliss training. She felt that he was generally more willing and more successful at communication attempts. Firstly output in spontaneous speech at home has increased in length and three and four word utterances are quite commonly noted. As well, prior to the program the child was often reluctant (or unable) to provide additional information if initial output was not understood. At the present time however the child is able to offer more information until such time as the message has been communicated.

SUMMARY:

A case study has been presented of an eight-year old child, who after five years of traditional speech therapy still did not have functional language. While receptive language was only one year delayed, expression was mainly limited to non-verbal methods and two word combinations.

Blissymbols were therefore introduced in October, 1979, with the goals being to provide an augmentative form of communication and to increase verbal output. With the introduction of visual symbol cues, the child's expressive skills were noted to improve, both when using the visual cues of the board and in more spontaneous situations. Language is still severely delayed and non-verbal cues are sill an integral part of his communication attempts outside of the therapy situation. However, it now appears that with the aid of Blissymbols and more intensive therapy that the child's language will become more functional than ever believed possible before.

NEWS FROM HILVERSUM, HOLLAND

(The following "news" is extracted from a Christmas card sent by symbol instructors, Hanneke and Caroline, to Shirley McNaughton. Along with the traditional message, it announced that "Unto us is born - the Bliss Group")

With this little card, we want to tell you about our new activity - the Bliss Group. For the time of one year we have found funds that pay for it. The group comes together four times a week from 9:00 a.m. to 11:30 a.m. The leaders start at 8:15 with their preparation. From 9:00 to 10:00 is the group hour - the children (four at the moment) cannot have other therapies at this time. In this hour we learn new symbols and how to use them. From 10:00 to 11:30 the children may go to their other therapies or stay with us in the classroom where we play games and activities with them accompanied by Bliss symbols. From 11:30 to 12:30 we have time to discuss the programme, make new materials and to deliberate with others. In the afternoon, the children go to their own classes. We, the leaders, are an infants' school teacher and a speech therapist. We hope to let you know more about our group in the future.

THE RIGHT TO BE INDEPENDENT IN COMMUNICATION

By: Susan Ravlin

(Susan Ravlin is a Speech Pathologist at the Henry H. North School in Lansing, Michigan. This article is reproduced with permission from "Communication Outlook", September, 1979)

Within the last decade there has been significant development in augmentative systems of communication, with particular emphasis on providing non-vocal children with a means to communicate. Perhaps it is not enough to merely give a child the means of communication; each person should have the right to communicate independently.

In the fall of 1977, Ingham Intermediate School District (IISD) initiated a Communication Enhancement Project with the Artificial Language Laboratory at Michigan State University. Our goal was to develop an individualized technological communication aid for a 12 year old child who had no oral speech. He was communicating by using a Blissymbol board and was able to relate a wide range of ideas with a variety of people.

Why was this communication system not completely satisfactory? The student was dependent on another person being available to "read" his Blissymbol communication. Moreover, each of his responses were subject to this second person's interpretation.

Our IISD-MSU team designed a system that would satisfy the following requirements: (1) the user could communicate independently, (2) his output would closely resemble typical patterns of spoken English.

The present "Semantically Accessible Language" (SAL) Board has three types of output that can be operated independently. Vocal output is used particularly to initiate communication or for ongoing conversation. Displayed alphanumeric output (soft copy) lets the user privately edit his output when he wants to plan his communication response. Printed output (hard copy) is available primarily for correspondence, schoolwork or whenever a permanent copy is desired.

The system was initially designed and developed by our Communication Enhancement Team for one particular student in Lansing, Michigan. Now new versions of the SAL Board are being made for students in other Michigan school districts.

SAL (Semantically Accessible Language) Board. The SAL Board is a computer-based talking/printing communication system which is being developed at the Artificial Language Laboratory, Michigan State University.

The SAL Board, incorporated in a wheelchair laptray, consists of a microprocessor, a printer for orthographic output, an LCD or LED display, a Votrax voice synthesizer board, an input switch matrix, and a power supply.

The user indicates the desired sequence of Blissymbols by activating squares on a touch or magnet-sensitive surface. Certain squares are designated as medium-term memory squares and may be used to store user-created phrases.

Correct spelling and pronunciation of noun plurals, verb tenses, case of pronouns and verb complements, (e.g. the word "to" in "I want to go."), are figured out automatically by the computer. In order to make better use of the keyboard space, Bliss strategies such as "sounds like," "make action with," and "opposite" are incorporated into the linguistic rule structure. Words and phrases are stored in the memory of the microprocessor as sequences of "orthophones," a specialized notation developed at MSU that, in combination with the rules of phonology, allows the computer to generate both orthographic and phonetic representations of the selected symbols.

The development of the SAL Board has been funded by Michigan State University, the Vandervoort Foundation, Northville (Mich.) Public Schools, and Wayne, Ingham, and Alpena-Montmorency-Alcona Intermediate School Districts.

ADAPTING THE HANDI VOICE 110 FOR BLISSYMBOL USERS

By: Loretta Biasutti
Calgary, Alberta

The Handi Voice 110[1] is a portable, battery-operated electronic voice system for use by speech-impaired individuals. The potential of this unit for increasing independent communication has led many Blissymbol instructors to adapt the Handi Voice to permit use by non-reading Blissymbol students. This paper describes our experience in developing a Blissymbol overlay and perceived advantages and disadvantages. It is hoped that this information will assist other instructors who are considering adapting the Handi Voice.

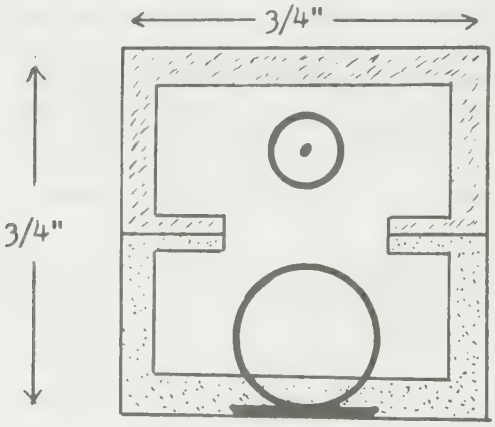
Design of Blissymbol Display

Since the Handi Voice is pre-programmed, the choice of vocabulary is limited to the English word meanings printed on each overlay. Each 3/4" square of the grid lists four words, a particular word accessible by first touching one of four "Level" squares, coloured red, yellow, green or orange. For example, by touching the red square marked "Level 1", the last of the four words listed in a particular square will be "spoken" when the square is touched.

Since each square is only 3/4" in size, it would be nearly impossible to include the four Blissymbols and corresponding words within it. We chose to include two Blissymbols, one below the other, with no English translation. The two words represented on each square of the grid were chosen in collaboration with the teacher and the residence staff. In some cases, the choice was straightforward. For instance, since the Blissymbol user could not spell or use phonemes, alphabetic characters and phonemes were eliminated. In other cases, the choice of the most useful two words within a square was more difficult, as in the choice between "leg", "night", "table", "I want".

[1] For the purposes of this paper, it is assumed that the reader is familiar with the operation of the Handi Voice. Manufacturer's information available through Phonic Mirror Handi Voice, Phonic Ear Ltd., 2688 Slough Street, Mississauga, Ontario.

A colour coding system was used to designate at which "Level" each of the symbols were programmed. A particular square on the grid would look like this:



/// coloured shading

... coloured shading

In the above example, the word "eye" is accessed by first touching the red Level 1 square. Therefore, the colour shading along the top and half-way down the sides is red. The word "day" is accessed by first touching the yellow Level 2 square. Therefore, the colour shading along the bottom and half-way up the sides is yellow.

Since we had drawn two Blissymbols in each square of the grid, we needed to designate which two Blissymbols belong within the same square. Otherwise the Handi Voice user could not identify where to touch the display to access a particular symbol. Each square on the grid must be touched firmly, right in the centre of the square, in order to activate the voice output. We decided against outlining each square of the grid in fine black pen, since this would have increased the visual confusion of an already cluttered display. Also, in order to have space for two symbols along with indicators, the bottom edge of each square served as "earthline" for the lower symbol. Thus, symbols drawn on the "earthline" would have been obscured by the black border. Our solution, as shown in the sketch above, was to extend the colour shading towards the centre of each square on the grid. The space between the extended colour shadings designated the part of the square to be touched in order to activate the voice output. This procedure proved to be effective for our Handi Voice user.

Although the Handi Voice manufacturer provides a black grid to accommodate substitutes to written words, we chose instead to draw symbols on a separate piece of graph paper (10 squares per inch), which was then covered with clear adhesive-backed acetate. Since we did not have access to printing services for exact reduction, symbols were hand-drawn with a full-size symbol one-fifth inch square. Needless to say, the symbols are very small and the very thickness of the pen affects the size proportions. For a permanent display, I would suggest that the display be designed with Blissymbols stamps or template drawings, then reduced to exact size for the Handi Voice.

Advantages of the Adapted Handi Voice

The advantages for a Blissymbol user are the same ones evident for a reader - the ability to communicate a message by using oral "speech", the ability to communicate with a person or group without need of a "interpreter", the ability to receive auditory feedback of one's message.

However, after much consideration, I have come to the conclusion that the disadvantages far outweigh the advantages for a Blissymbol user. Following are my concerns:

Disadvantages inherent in the Handi Voice design

The description of the Handi Voice as "touch-sensitive" seems to be understating the case. In fact, a very firm press is required to activate the output, and the press must be made near the exact centre of the square. Therefore, Handi Voice users with poor motor control or weak touch have difficulty accessing the display. A related problem is the lack of interfaces to permit accessing the display by other means than finger or head pointing.

A second design problem is the lack of consistency in position of "Level" squares and their corresponding words. "Level" squares are located one beneath the other in the first column, with Level 4 square first, then 3, 2 and 1. However, within each display square, words are listed with Level 1 word on top, followed by 2, 3 and 4. In translating to a Blissymbol display, this inconsistency can be corrected, but the reversal is more time-consuming and increases the likelihood of error in colour-coding the display.[2]

Disadvantages in adapting the Handi Voice for the Blissymbol user

1. Standard vocabulary:

   The Handi Voice suffers from the same disadvantages as other standard vocabulary displays - the vocabulary chosen does not necessarily suit the needs of an individual speech-impaired person. To further complicate matters, we are attempting to translate the standard vocabulary of one communication system (i.e. the English language) into another, not necessarily compatible, one (i.e. Blissymbolics). The underlying assumption in the design of the Handi Voice is that there is a particular written word corresponding to a particular sound output. The assumption does not hold with Blissymbols which are meaning-based rather than sound-based. A particular "written" Blissymbol may correspond to a number of English words with similar meaning. Several of the following points are a reflection of this essential difference between Blissymbolics and English.

[2] I understand that this inconsistency has been eliminated in later edition of the 110, and green colour Level has been changed to blue.

2. Redundancy:

Since Blissymbols are meaning-based, several of the English words on the display could be represented by the same Blissymbol, thereby saving space on the display.

e.g. take, get

am, are, is be

I me

sweater, jacket, coat

talk, speak

listen, hear

Our display did not include English words to denote the "spoken" output for each symbol. Therefore, in some squares, we used initial consonants along with the symbol (e.g. to differentiate "take" and "get") or English words alone, with the eventual aim of teaching some sight vocabulary, (e.g. am, is).

I have listed this redundancy as a disadvantage, but it does have the advantage of reinforcing the concept of extended meanings for a single Blissymbol.

3. Lack of specificity:

The pre-programmed output of single words does not specify part of speech (e.g. "open" could be a verb or an adjective; "call" could be a noun or a verb). While this factor is unimportant to the English spelling of these words, it does influence the drawing of Blissymbols. The symbol student has been taught to attend to the meaning of symbols, but the Handi Voice output does not allow differentiation of meaning for English words that sound the same.

4. Non-Generative:

The Handi Voice has the capability for unlimited vocabulary through the combined use of morphememes, phonemes, letters and words. However, for the non-reading advanced symbol user, there is no capability for more sophisticated Bliss usage through special functioning Blissymbols. For instance, there is no way to indicate plural except through English morphemes. Therefore, the advanced symbol user becomes limited in his communication while at the same time valuable space on the display is occupied with symbols which might be unnecessary.

e.g.-opposite meanings (rather than use of a symbol - opposite meaning).

-verbs in different tenses (rather than only present tense verbs and tense indicators).

-body parts and verb forms (rather than only body parts and action indicators).

-months of the year (rather than only the symbol for month plus numbers).

-etc.

5. Stilted output:

The Handi Voice can produce "spoken" output mirroring normal conversation through the use of morphemes, phonemes, letters and words. However, Blissymbols do not have markers corresponding to English word forms, which may change with person, number and tense - (e.g. "book" - "books" vs. "child" - "children"; "was going" ve. "went"; "I want" vs. "he wants"). The output from a Blissymbol user, although perfectly correct Blissymbol usage, may seem stilted and immature in English. Not only does this create a negative image of the competent user, it also provides poor feedback to the user to the English message he/she is actually attempting to convey.

6. Imposed colour coding:

Most Blissymbol displays are colour-coded by categories to assist the symbol user in locating symbols. If the symbol user has become accustomed to this aid, it may be a difficult transition to an adapted Handi Voice display. As described earlier, output for each word is accessed by first touching a coloured "Level" square. Colour coding must be based on the colours of the four "Levels" (red, yellow, green or orange) to assist the user in triggering the appropriate word output.[3] Colour does not become a meaningful cue for locating particular categories of symbols. Other complicating factors would be colour blindness, and interference of previous color coding systems (e.g. where previously symbols for clothing were orange, but on the Handi Voice display are red).

7. Imposed display organization:

Since the Handi Voice is pre-programmed, no flexibility of display organization is possible to adapt to the needs of the symbol user. Words are arranged more-or-less in horizontal categories (e.g. feelings, food and utensils, body parts, clothing, people). In our case, since we chose to draw symbols for only two out of four words in each square, a particular horizontal row might have prepositions, people, vehicles, phrases and objects all in the same row. As mentioned in point 5, there may be interference of previous learning if the user's previous Blissymbol display had been organized by columns rather than rows.

Words or phrases which may be highly meaningful or useful to the Blissymbol user (e.g. "no", "I need help", "How are you?", "I'd like") are scattered on the board, rather than grouped in one accessible spot, as they might be on a Blissymbol display.

For Blissymbol users with poor visual discrimination or poor attention to visual detail, instructors often place maximally similar symbols further apart. On the adapted Handi Voice display, maximally similar symbols are often all in the same row (e.g. "come", "go", "went", "start", "stop").

[3] As an alternative, the user could memorize the "Level" corresponding to each symbol, but it seems to me that this places an unnecessary load on the user.

8. Small size of symbols necessary:

As described above, under the heading "Design of Blissymbol Display", it is difficult to include more than one Blissymbol out of four possible in each 3/4" square. If the instructor chooses to omit the English words as we did, to permit space for two Blissymbols, the naive listener may become intimidated by the unfamiliar symbols. The voice output provides a translation for each symbol, but without the English translation printed along with each symbol, the listener is not encouraged to learn more Blissymbols by looking at the display.

Given all of the above disadvantages, I feel that the following Blissymbol users would have difficulty in communicating effectively with an adapted Handi Voice:

- severely physically involved individuals with poor pointing skills.
- individuals who have limited range of motion and cannot access the total display.
- individuals with problems in visual discrimination, visual acuity, or colour blindness.
- individuals who lack the cognitive skills to carry out a two-step process in order to use a symbol.
- individuals for whom old learning might interfere with new display organization (this interference is common among mentally retarded individuals).

Who Could Use the Adapted Handi Voice?

An advanced symbol user would be able to communicate a good deal of information with the Adapted Handi Voice, although his sentence output may be stilted in "spoken" English. In my experience, most sophisticated Blissymbol users have at least basic English reading skills. I would suggest that they use the printed word overlays on the Handi Voice.

This may require instruction in phonics, or development of increased sight vocabulary, or even reliance on position cues. The most effective use of the Handi Voice that I have seen was by a reading Blissymbol user. This young man used his Blissymbol display for quick communication or intimate conversation. At workshops or larger gatherings he composed his messages with the Handi Voice (not adapted to symbols) and was able to address the group. Don took the best of both devices without feeling overly bound to either - he has a lesson for us all.

BLISSYMBOLICS FOR LANGUAGE AND COGNITIVE DEVELOPMENT

By: Anne Warrick
Ottawa

Many preschool settings are becoming more and more interested in appplying Piagetian theories of child development in their classrooms and it is this aspect that I am presently interested in, and the application of symbols in this framework. I have considerable difficulty understanding Piaget's own writings but fortunately many of his ideas have been more simply explained and I have found a wealth of information and books from the High Scope Educational Foundation and the book The Cognitively Oriented Curriculum by Waikart, Rogers, Adcock and McClelland has also been useful and helped me prepare this correspondence.

In my limited understanding, the development of intelligence according to Piaget is affected by the (1) hereditary transmission of physical structures, (2) inherited behavioural reactions i.e. - the reflexive responses, and (3) the fact that all species inherit two basic tendencies called adaptation and organization.

Organization can be defined as the tendency common to all forms of life, to integrate structures which may be physical or psychological into higher order systems or structures.

Adaptation is considered in terms of 2 complementary processes - Assimilation and Accomodation. The process of accomodation describes the individual's tendency to change in response to the environment while assimilation is the complementary process by which the individual deals with an environmental event in terms of his current structures. This means then, that the child both adapts incoming knowledge to his view of the world and adapts his view of the world to the new knowledge - thus the structure of intelligence is potentially modifiable and these changes occur in the direction of greater complexity and abstractness.

Piaget looks at performance on the motoric level and on the verbal level. Until the child has language he manipulates the environment on a physical level. Language is important in constructing and extending mental representations and thus plays an important part in the development of representational thought. Once the child acquires language he has an efficient tool to learn about and manipulate his environment.

In looking at Piaget's levels of representation, we find:

1. Index - Part or sound or selection of object
2. Symbol - drawing or model of object
3. Sign - verbal word and written word

For a child to develop a basic understanding of himself and the world he must see himself in a framework of time and space and be able to order objects and events. Later the child must develop mental representations of himself and his environment and again organize these events. These two developments are complementary one to the other. They are dealt with through direct physical manipulation (motoric level) with involvement on the verbal level being added later but not displacing the motoric experience. Movement facilitates vocal expression and should be made the experience of handicapped children. A child's motoric experience of rolling gives him the basis to generalize that round/cylindrical objects (ball, apple) will all roll and also provides him with the word to deal verbally with the situation.

A cognitively orientated preschool programme would have four basic content areas which would at times inter-relate but in so doing would reinforce learning.

These areas are:

Classification - by function
- by association

Seriation - size
- quality
- quantity

Spacial relations - position
- distance
- direction

Temporal relations - beginning, end, 1st, 2nd, etc.

Finally, therefore, we can consider a framework for the development of cognition and the presentation of Blissymbols. Close inspection shows us that many symbols needed for language are beyond the normal, let along physically handicapped child's cognitive level, e.g. where number, math concepts, etc. exist.

Let us now take a look at language. We must always consider the development of articulation and vocal skills and whereas these are important attributes we will leave the expressive areas and consider language more fully from the receptive understanding areas. As the child is experimenting with vocal play and babbling he is, through other senses learning of his environment, until, around one year of age, he has sufficent memory to start producing intelligible and meaningful utterances.

The development of language has been researched by Bloom and Lahey and it is from their works that the following outline is presented.

The earliest structural forms of these rules for two word utterances are:

1. Agent followed by action, Daddy go
2. Action followed by object, Throw ball
3. Agent followed by object, Daddy car
4. Location (agent object), Ball - Chair
5. Location Action, Throw here
6. Negation, No ball

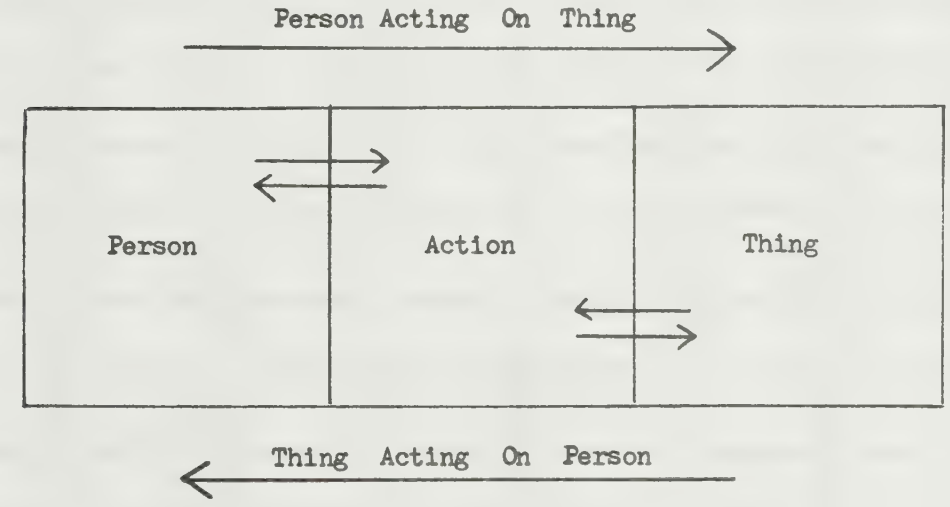
The structure of agent, action, object seen in the early development of language follows semantic rules and also fits very nicely into the simplicity of Mr. Bliss' four statement models.

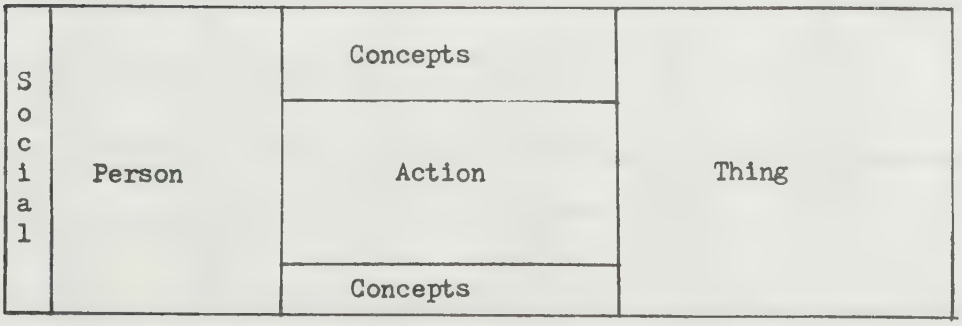
The Introduction of Blissymbol stamps and individually designed boards require much thought from us all in the construction of displays and I hope that sharing of ideas will go on between us in future newsletters. The design of the Bliss boards I am using in preschool now does not follow the Fitzgerald key or that described in the preschool booklet - see format following this article. Such a display will allow language development along with cognitive skills. It presents a left right, right left and to centre and out format for Bliss statement facts. Around this is an arrangement of concepts related to space, time, quality etc. This arrangement is also being used in T.M.R. settings in Ottawa and is successful.

My concern at present is whether any symbol beyond the child's cognitive level should be presented. There seems to be two philosophies here, (1) to use a picture instead of the symbol until the child can cognitively manage it or (2) to present the symbol as arbitrary and let the child come to the understanding of it.

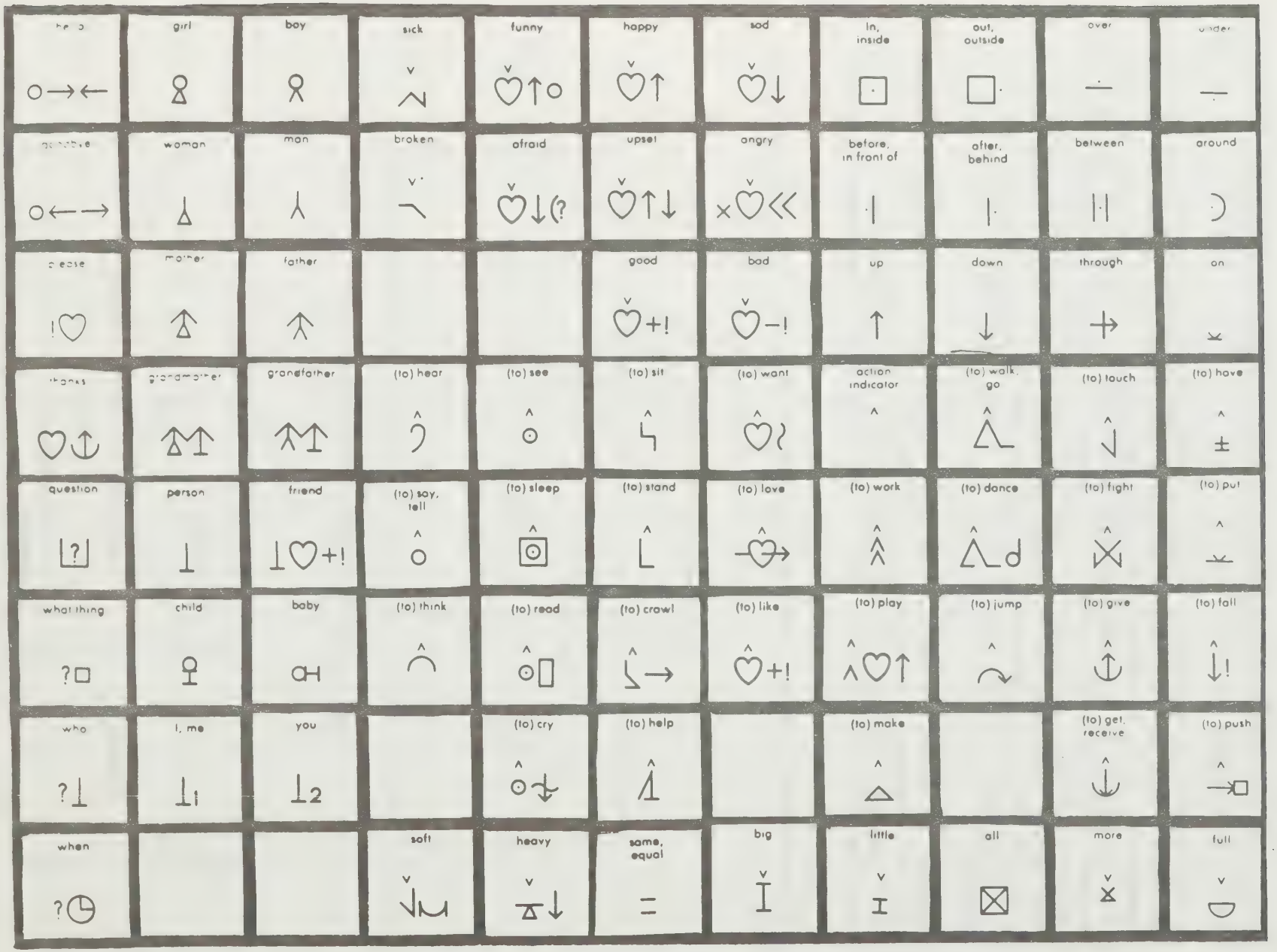
I do hope someone else will keep this correspondence going - there is so much to share.

.....





A


girl
boy
sick
funny
happy
sad
in, inside
out, outside
over
woman
man
broken
afraid
upset
angry
before, in front of
after, behind
between
around
mother
father
good
bad
up
down
through
on
grandmother
grandfather
(to) hear
(to) see
(to) sit
(to) want
action indicator
(to) walk, go
(to) touch
(to) have
person
friend
(to) say, tell
(to) sleep
(to) stand
(to) love
(to) work
(to) dance
(to) fight
(to) put
child
baby
(to) think
(to) read
(to) crawl
(to) like
(to) play
(to) jump
(to) give
(to) fall
I, me
you
(to) cry
(to) help
(to) make
(to) get, receive
(to) push
soft
heavy
same, equal
big
little
all
more
full

Note: Display arrangement has been adapted to fit Newsletter. The actual display is colour-coded according to format on previous page with sections A and B placed side by side to form one symbol display. This particular display was created to meet the needs of a specific symbol user and is not to be regarded as a model for other displays.

B

Penny Parnes
Blissymbolics Communication Service
Ontario Crippled Children's Centre

A NEW USE FOR BLISSYMBOLICS

Having been involved with Bliss for a long time (since 1973 - it seems forever), my family have of necessity had varying degrees of exposure to symbols. It was about 6 months ago, that my daughter Sarah (age 4) discovered a very practical way that symbols could be of use to her.

Sarah has been involved with symbols since her pre-natal days and consequently has an extensive symbol vocabulary. She is a speaking child and symbols have been a game for her rather than a communication system.

About six months ago, Sarah was really "into" phoning all her friends and relatives. She was quite capable of either having a phone number repeated slowly or seeing it written down and then dialing by herself. Her only obstacle to independent use of the telephone was her inability to read. She did, however, have the ability to recognize initial letters and determine that certain names started with certain letters.

Given all these skills, Sarah and I were able to devise a "telephone directory" that consisted of a symbol or a symbol plus a letter followed by a phone number. It allowed her total independence in telephoning. Entries in her "directory" looked something like this:


425-7835


531-5712

782-4578 (her friend Melissa)

425-7868 (Grandma Annie)

etc.

Sarah finds this very useful. However, there was one drawback. For the first few weeks, the receptionists at BCS had to get used to this little voice that frequently phoned and said "Can I speak to Mommy, please?"

SYMBOL USERS' CORNER

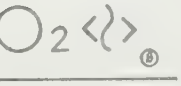
The following story was written by Todd Schinnerer, a 27-year old cerebral palsied resident of University Heights Nursing Home in Albany, New York. He has been using Blissymbolics with a headlight pointer for approximately one and a half years. He particularly enjoys his new ability to ask questions and is retaliating against the thousands of previously unanswered questions directed to him by bombarding us with constant questioning. Todd is a sports enthusiast and cheers for the Pittsburgh Steelers and New York Yankees. A picture of Reggie Jackson has prime position with family members on his communication board. Todd would enjoy a pen pal and hopes that a symbol adult will contact him via the BCI Newsletter. (Jane Conklin)

TODD

A handsome, happy fellow!

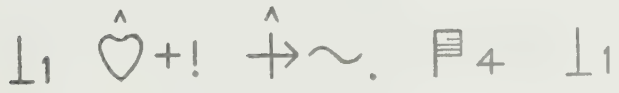
SUMMER

by: Todd Schinnerer
Albany, N.Y.



I like summer. I like (it) because (it's) hot (and)

I like to swim. "On the fourth of July" I would

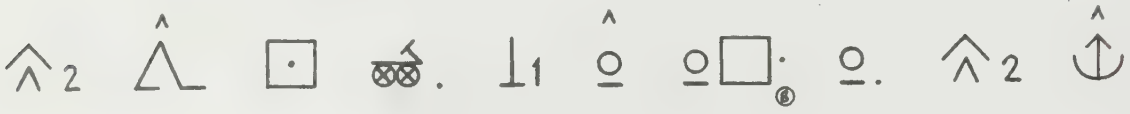


like (an) outing (with my) boyfriend (to a) concert.

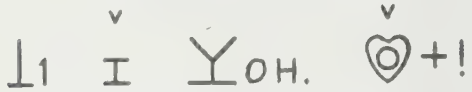
I like music because I feel happy. Last year

I went (on a) picnic (at the) park. (My) father (and) mother (and)

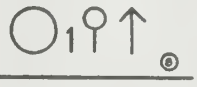
Rod came in (the) car. I ate picnic food. Rod gave



me (a) little drink. Wow!



SPRING



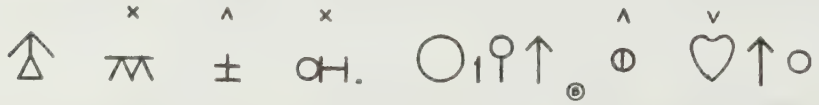
by: Symbol Communication Class
Cerebral Palsy Centre,
Hamilton, Ontario

We are learning about Spring.

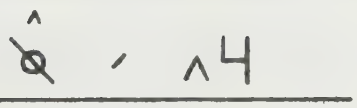
The flowers come up. The rain comes down.

The sun comes out. We play outside.

Mother animals have babies. Spring is fun.



NAME THE SPORT



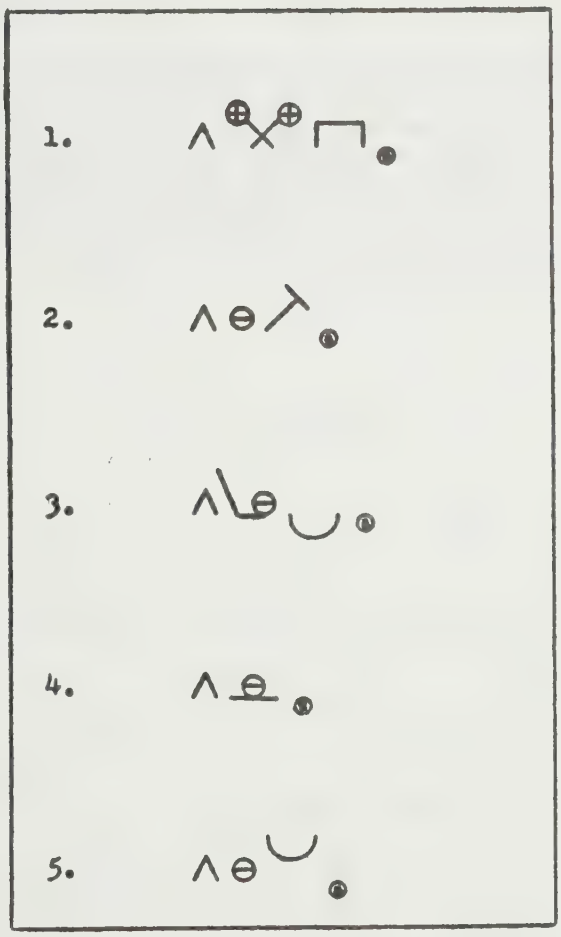
(Reproduced with permission from classroom newsletter, Ottawa Crippled Children's Centre, March 1980)

racquet

ball

hammer

earth



stick

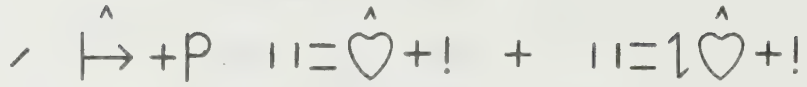
container

activity

table

For answers, turn to page 40 .

THE PROS AND CONS

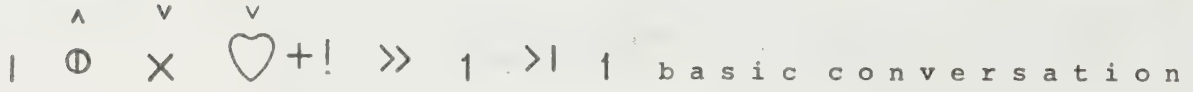


OF USING BLISSYMBOLS

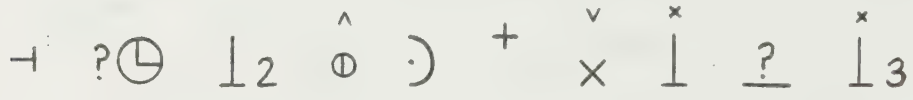
By: Paul Marshall
Binbrook, Ontario

(Paul Marshall is eighteen years old; a bright young man who has been using a combination of Blissymbolics and spelling to communicate for the past six years. After spending his entire school life in special schools and classes, he will be attending regular high school this coming Fall. Paul will be familiar to some of our readers through previous articles published in the Newsletter. See June 1976 for his teacher's description of Paul's introduction to Blissymbolics, and Spring 1978 for Paul's own story, "The Day I Met Mr. Bliss." Ed.)

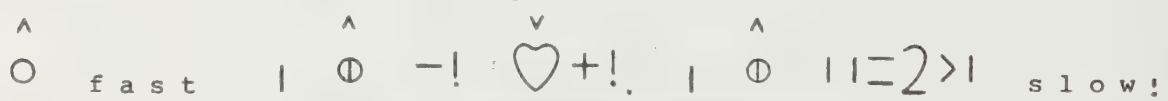
It is great for one to one



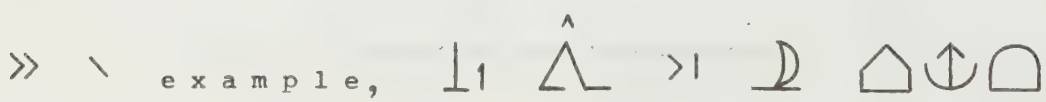
but when you are around with many people where they



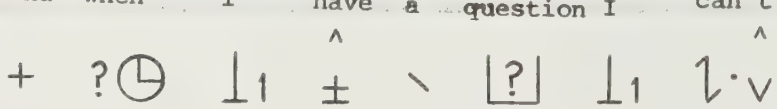
are speaking it is not good. It is too



For an I go to night school



and when I have a question I can't

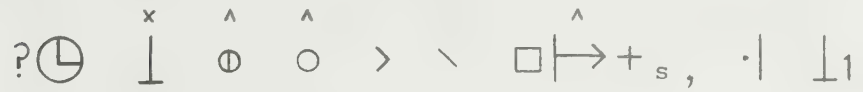


hold up the teacher. Sometimes after

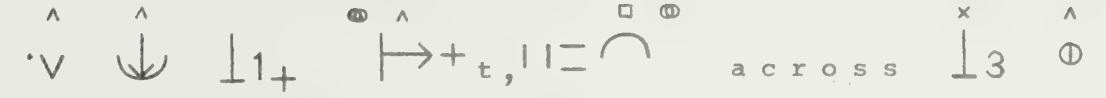
I have forgotten the answer but it does not

the people do not like me.

When people are talking about a subject, before I



can get my thoughts they are

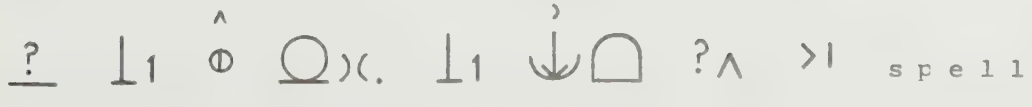


on to another subject. I have learned to

be a good listener. But if I had not

learned the Blissymbol I not have gotten

where I am today. I learned how to



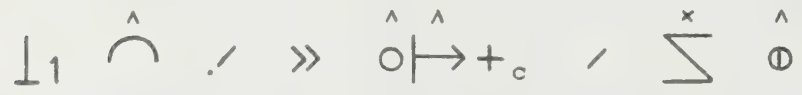
much better and my reading came along with use

from the Blissymbols.

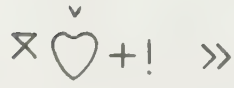
Even I can type,

though

I think that for communication the Blissymbols are



best for .



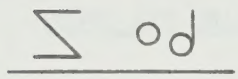
now.

BLISS SONG

(Reproduced with permission from the British Blissymbolics Newsletter, January 1980)

This song is sung to the tune, "All Things Bright and Beautiful". Bliss users vocalize and bang their boards in rhythm. It was composed for, and first performed at, the end-of-term Concert and Prize Giving Ceremony at Westerlea School, Edinburgh, Scotland. It was a most moving occasion with the whole school gathered together with staff, family and friends. Everyone joined in singing the song as the Bliss children banged their boards in rhythm (more or less) but there were lumps in many throats that made singing difficult! It was a particularly emotional time for co-composer Alistair Hunter and the staff members closely associated with him for it was his school-leaving ceremony. He is a much-loved boy - open, warm and friendly - and very caring towards the younger Bliss children who followed in the trail he blazed as the first and very successful Bliss user in Scotland. He is now in an adult centre, doing his bit to spread information about Blissymbolics. We are proud of him and we miss him. (Sally Millar)

BLISS SONG



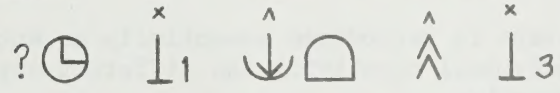
Composed by:

Symbol user Alistair Hunter
Speech Therapist Elizabeth Dean
Edinburgh, Scotland

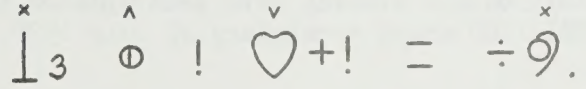
We are all Bliss children.

We have symbols on our boards.

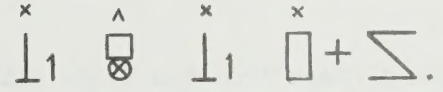
When we learn "(to)use" them,



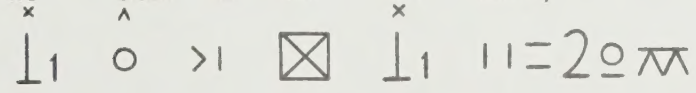
They are just as good as words.



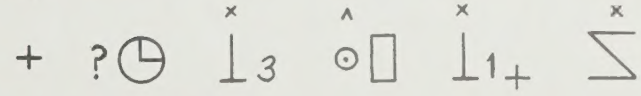
We take our Bliss boards (with us).



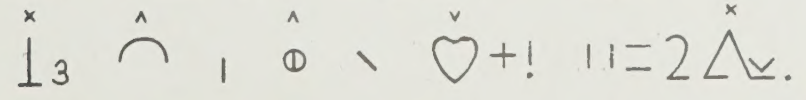
We talk to all we meet,



And when they read our symbols



They think it's quite a feat



Repeat chorus - first four lines

ANSWERS - NAME THE SPORT

1. Ping Pong
2. Croquet
3. Golf
4. Bowling
5. Basketball

NOTE: Material from symbol users is reproduced essentially as submitted in order to reflect individual creativity and different styles for expression or instruction.

1) the symbol composition and drawing have been updated to conform to the BCI 1000 stamp vocabulary of July 1978.

2) although the combine strategy is frequently employed to arrive at new symbol expressions, the personal symbol creation is often not enclosed between combine indicators as required by BCI practice.

(B) indicates - 1) a symbol which differs from the C. K. Bliss version either in symbol form or accompanying wording or - 2) a new BCI symbol authorized in the absence of requested comment from C. K. Bliss.